REMARKS

The Applicants have amended the Specification and Abstract to place them into better form for allowance. Entry into the official file is respectfully requested.

Claim 1 has been amended by incorporating the subject matter of Claims 2 and 3. Claims 2 and 3 have accordingly been cancelled. Claim 1 has further been amended to recite the amount of Mn as being 0.1 to 2.0, the amount of Cr as being 10 to 20.45, and the amount of Sc, Y, La, Ce, Pr, Nd, Pm, Sm, Zr and Hf as being 0.005 to 1.0. Of course, all of the new ranges are inherently supported by virtue of the broader original range. Specific support for the Mn and Cr amounts may be found in Table 1.1, for example. Mn is an element necessary for improving adhesiveness of the oxide layer and is specified as 0.05% or more as a preferable addition amount in the present application. In view of adhesiveness of the oxide layer and as a preferable content, the minimum limit is amended to 0.10% which accounts for the majority of the inventive examples of the present application.

Cr is an element necessary for securing oxidation resistance. However, because excessive addition degrades workability, the maximum limit is set as 40%, preferably 30% or less, in the present application. In view of workability and as a preferable content, Cr content is amended to 20.45% or less which accounts for the majority of the inventive examples of the present application. Specific support for the 0.005 endpoint may be found in the Applicants' Specification on page 17 at line 13, for example.

Claim 10 has been amended similarly with respect to Claim 1 as it applies to the amounts of Mn, Cr and the other elements. Claim 10 has further been amended to include the subject matter of Claim 11. Claim 11 has accordingly been cancelled.

Various of the dependent claims have been amended to account for amendments wherein Claims 2, 3 and 11 have been combined into their respective independent claims and the cancellation thereof. Entry of the amendments to the claims into the official file is respectfully requested.

Claims 1-21 stand rejected under 35 U.S.C. §102 as being anticipated by EP '214. The Applicants respectfully submit that the rejection is now moot with respect to at least cancelled Claims 2, 3 and 11. The Applicants respectfully submit that EP '214 is nonetheless inapplicable to the remaining claims. Reasons are set forth below.

EP '214 discloses steels of the type mentioned by the Applicants on page 2, paragraph 0001:

> The present invention relates to a Cr-containing steel. In particular, the present invention relates to a soft Cr-containing steel which has both heat resistance and formability and is suitable for members used in high-temperature environments, for example and especially, exhaust pipes of automobiles and motorcycles, outer casings for catalysts, and exhaust ducts in thermal power plants.

In sharp contrast, Claims 1 and 10 are set forth in the Specification on page 1, under the heading of Technical Field, namely:

> The present invention relates to a metallic material for solid-oxide fuel cells. Particularly, the present invention relates to a metallic material for interconnects of solid-oxide fuel cells having oxidation resistance in use at high temperatures and electrical conductivity, a fuel cell using the metallic material, and a method for producing the metallic material.

Therefore, in EP '214, there are no descriptions concerning electrical conductivity which is an important feature of material for fuel cells. Further, there is no disclosure as to the precipitation amounts of precipitates before being used as a separator of a fuel cell to thereby secure stable oxidation resistance.

Hence, Claims 1 and 10 are different from EP '214 in terms of their objects. To demonstrate the differences, the Applicants note that there are no inventive examples in EP '214 that satisfy the

Applicants' Claims 1 and 10. Table 1 of the inventive examples of EP '214 is attached for the Examiner's convenience. The columns in yellow in the Table indicate values which are out of the ranges of Claims 1 and 10.

Particularly, the Mn contents of Nos. 10 and 12, which the Examiner helpfully pointed out, in Table 1 of EP '214 are 0.09% and 0.08%, respectively, and are out of the minimum limit of Mn of 0.10% of Claims 1 and 10. Also, B is added in Nos. 10 and 12 in Table 1 of EP '214 and there is disclosed on page 6, paragraph 0041:

> B is an effective element for improving the workability , especially, workability for secondary processing . . . More preferably, it is from 0.0005% to 0.0050%.

In sharp contrast, B is not an indispensable element according to Claims 1 and 10.

As a consequence of the foregoing, Claims 1 and 10 are dissimilar to EP '214 in their objects and, hence, no inventive examples satisfy Claims 1 and 10. The Applicants respectfully submit that EP '214 fails to disclose, either explicitly or implicitly, all of the subject matter recited in the solicited claims. Withdrawal of the rejection is respectfully requested.

Claims 1 – 21 stand rejected under 35 U.S.C. §102 as being anticipated by US '780. The Applicants respectfully submit that the rejection is now moot at least with respect to cancelled Claims 2, 3 and 11. The Applicants respectfully submit that US '780 is also inapplicable to the remaining claims for the reasons set forth below.

US '780 discloses in column 1, lines 16 to 26 under the heading of Technical Field and Industrial Applicability of the Invention:

> . . . the present invention is directed to a ferritic stainless steel alloy having microstructural stability and, mechanical properties making it particularly suited for high temperature applications. Such applications include, but are not limited to, current collecting interconnects in solid oxide fuel cells, furnace hardware, equipment

> for the chemical process, petrochemical, electrical power generation, and pollution control industries, and equipment for handling molten copper and other molten metals.

The problem to be overcome by US '780 is, as set out in column 3, lines 1 to 9:

> Thus, there exists a need for an improved stainless steel alloy having high temperature creep resistance, good thermal stability and other characteristics that make it suitable for use as current collecting interconnects in SOFC's and for use in other high temperature applications, such as in equipment for the chemical process, petrochemical, electrical power generation, and pollution control industries, as well as in furnace hardware and equipment for handling molten metals.

In other words, US '780 is characterized in the improvement of high temperature creep resistance.

In sharp contrast, a main point of Claims 1 and 10 can been seen in the Applicants' specification on page 1, under the heading Technical Field:

> The present invention relates to a metallic material for solid-oxide fuel cells. Particularly, the present invention relates to a metallic material for interconnects of solid-oxide fuel cells having oxidation resistance in use at high temperatures and electrical conductivity, a fuel cell using the metallic material, and a method for producing the metallic material.

Therefore, as the Examiner helpfully points out, the uses are partly the same as a metallic material for solid-oxide fuel cells. However, US '780 does not include descriptions concerning electrical conductivity - - - which is an important property for a material for fuel cells. Further, there is no disclosure concerning the precipitation amounts of precipitates before being used as a separator of a fuel cell to thereby secure stable oxidation resistance.

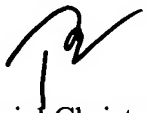
From the foregoing, Claims 1 and 10 are different from US '780 in terms of their objects. To demonstrate the differences, the Applicants again note that there are no inventive examples in US '780 that satisfy Claims 1 and 10. Table 1 of inventive examples of US '780 is attached for the

Examiner's convenience. Columns in yellow in the Table indicate values which are out of the ranges of Claims 1 and 10.

This exhibits that the Mn content, which the Examiner pointed out in Table 1 of US '780 is 0.049% to 0.055%. This deviates from the minimum limit 0.10% of Mn specified in Claims 1 and 10. Moreover, the range of Cr in Table 1 of US '780 is from 25.52% and 25.98% and this deviates from the maximum limit 20.45% of Cr specified in Claims 1 and 10.

As a consequence of the foregoing, Claims 1 and 10 are dissimilar to US '780 in their objects. Hence, no inventive examples satisfy Claims 1 and 10. The Applicants respectfully submit that US '780 fails to implicitly or explicitly disclose all of the claimed subject matter. The Applicants therefore respectfully submit that US '780 is inapplicable. Withdrawal of the rejection is respectfully requested.

Respectfully submitted,



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